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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/647,230	08/26/2003	Sokichi Takemura	031028	1894	
23850	7590 03/25/2005	EXAMINER			
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP			NGUYEN, DUNG V		
1725 K STREI SUITE 1000	ET, NW		ART UNIT	PAPER NUMBER	
WASHINGTO	N, DC 20006	C 20006			

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	on No.	Applicant(s)				
Office Action Summary		10/647,23	30	TAKEMURA ET AL.				
		Examiner		Art Unit				
		Dung V N		3723				
Period fo	The MAILING DATE of this communication apor Reply	opears on the	cover sheet with the d	correspondence addres	s			
THE - Exte after - If the - If NO - Failt Any	ORTENED STATUTORY PERIOD FOR REP MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a re of period for reply is specified above, the maximum statutory period ure to reply within the set or extended period for reply will, by statu reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	136(a). In no even ply within the state d will apply and wi te, cause the appl	ent, however, may a reply be tir story minimum of thirty (30) day Il expire SIX (6) MONTHS from ication to become ABANDONE	nely filed s will be considered timely. the mailing date of this commur (D (35 U.S.C. § 133).	nication.			
Status								
1)	Responsive to communication(s) filed on 09 i	December 20	004.					
·	This action is <b>FINAL</b> . 2b) This action is non-final.							
3)	<u> </u>							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
5)⊠ 6)⊠ 7)⊠	Claim(s) <u>1-6</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra Claim(s) <u>3</u> is/are allowed. Claim(s) <u>1 and 4-6</u> is/are rejected. Claim(s) <u>2</u> is/are objected to. Claim(s) are subject to restriction and/	awn from coi						
Applicat	ion Papers							
9)	The specification is objected to by the Examin	ner.						
· · ·	The drawing(s) filed on is/are: a) ac		objected to by the	Examiner.				
	Applicant may not request that any objection to the		•					
	Replacement drawing sheet(s) including the corre	ction is require	ed if the drawing(s) is ob	jected to. See 37 CFR 1.	121(d).			
11)	The oath or declaration is objected to by the E	Examiner. No	te the attached Office	Action or form PTO-1	52.			
Priority (	under 35 U.S.C. § 119							
a)	Acknowledgment is made of a claim for foreig  All b) Some * c) None of:  1. Certified copies of the priority documer  2. Certified copies of the priority documer  3. Copies of the certified copies of the pri- application from the International Burea  See the attached detailed Office action for a list	nts have bee nts have bee ority docume au (PCT Rule	n received. n received in Applicati ents have been receive e 17.2(a)).	on No ed in this National Stag	je			
Attachmen	ıt(s)							
1) Notic	e of References Cited (PTO-892)		4) Interview Summary					
3) Infon	te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 or No(s)/Mail Date	3)	Paper No(s)/Mail D: 5) Notice of Informal F 6) Other:	ate Patent Application (PTO-152)	)			

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiue et al (USPN 5,846,269). Shiue et al discloses a metal-bonded grinding tool comprising a base, abrasive grains bonded to the base by means of a metal bond matrix containing a Cu alloy as a main component, wherein the metal bond matrix, the metal bond matrix consisting essentially of a Cu alloy as main component, zirconium and titanium being present as an alloy phase, a mixed phase or an intermetallic compound, the metal bond matrix is in a range of 20 wt%, wherein the weight ratio of Ti and Zr is 1, wherein the Cu alloy consisting of a bronze containing 23 wt% of Sn, wherein the abrasive grains are abrasive grains of diamond or cubic boron nitrate (note Table III, col. 3, line 3 to col. 4, line 9, col. 7, line 21 to col. 8, line 25).

### Allowable Subject Matter

- Claim 3 is allowed.
- 4. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Response to Arguments

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5. Applicant's arguments filed on 9 December 2004 have been fully considered but they are not persuasive. In response to applicant's argument that Shiue et al requires component elemental carbon and titanium carbide in the bond material, the carbon and titanium carbide will be present in Shiue's bond material after brazing and this material does not meet the "consisting essentially of " compositional limitation of claim 1, Shiue et al clearly shows in Table III, Comparative Example 15 that the bond matrix consisting of zirconium and titanium. Thus the material of Shiue et al meets the compositional limitation of claim 1.

#### Conclusion

- 6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- 7. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung V Nguyen whose telephone number is 571-272-4490. The examiner can normally be reached on M-F, 7:00-3:30.

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9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph J Hail can be reached on 571-272-4485. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

DVN

March 16, 2005

Jung vom hanger

DUNG VAN NGUYEN PRIMARY EXAMINER